



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,334	08/28/2001	Y. Denis Yerlikaya	20518/14	7702

7590 09/21/2005
TYCO HEALTHCARE GROUP LLP
ATTEN: Intellectual Property Dept. Docketing Clerk
15 HAMPSHIRE STREET
MANSFIELD, MA 02048

EXAMINER

JAGAN, MIRELLYS

ART UNIT PAPER NUMBER

2859

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 09/942,334	Applicant(s) YERLIKAYA ET AL.	
	Examiner Mirellys Jagan	Art Unit 2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
6) <input type="checkbox"/> Other: _____. |
|---|--|

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 9, 11, 13, 18, 23, 25, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,008,614 to Turner et al [hereinafter Turner] in view of U.S. Patent 5,720,293 to Quinn et al [hereinafter Quinn].

Turner discloses an electronic thermometer comprising:

a removable module (10) having mating terminals. The removable module has a probe storage chamber, a temperature-sensing assembly formed by a temperature sensor (thermistor), and a cable assembly having a connecting portion with mating terminals for electrically connecting to a temperature calculating unit; and

a temperature calculating unit (18) having a header assembly with terminals in electrical connection with a microprocessor system, and a probe cover storage chamber;

wherein the header assembly removably mates with the terminals of the removable module; and the chamber for storing the probe being able to prevent storage of the probe while a cover is installed on the probe.

Turner does not disclose the removable module having a memory for storing calibration information, probe-specific algorithm parameters, or probe identifying information, wherein the

Art Unit: 2859

memory is capable of electrical communication with the temperature calculating unit when the removable module is installed to the temperature calculating unit, and includes calibration point parameters at different temperatures for calibrating the probe, and is incorporated in a connection portion in the probe assembly of the removable module, the memory being an EEPROM, and the memory storing a unique ID number associated with the probe that is a pre-programmed and validated EEPROM registration number; the removable unit having the cover storage chamber; and the sensor being a thermistor and the calibration parameters being resistance values.

Quinn discloses an electronic thermometer comprising a removable unit that includes a temperature sensor and a memory (EEPROM) for storing calibration information, probe-specific algorithm parameters, or probe identifying information, wherein the memory is capable of electrical communication with a temperature-calculating unit when the removable unit installed to the temperature-calculating unit, and includes calibration point parameters at different temperatures for calibrating the probe and is incorporated in the probe assembly of the removable unit, and is incorporated in the probe assembly of the removable unit, and the memory storing a unique ID number associated with the probe that is a pre-programmed and validated EEPROM registration number; the sensor being a thermistor and the calibration parameters being resistance values. Quinn teaches that it is useful to provide the memory in the removable unit in order to store patient information and calibration information. for ease of use (see abstract).

Referring to claims 1, 2, 5, 6 and 28, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the thermometer disclosed by Turner

Art Unit: 2859

by providing a memory in the removable unit, as taught by Quinn, in order to store patient information and calibration information for ease of use.

Furthermore, Turner teaches that the removable unit is removable in order to prevent the rest of the thermometer housing from being contaminated by a contaminated probe. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the thermometer disclosed by Turner by integrating the cover chamber with the removable unit instead of the temperature calculating unit in order to ensure that contaminated probe covers are not used by a clean removable unit when a contaminated probe is replaced.

Referring to claim 5, in utilizing the device disclosed by Turner and Quinn above to measure temperatures, the method steps of claim 5 will be followed.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turner and Quinn, as applied to claims 1-7, 9, 11, 13, 18, 23, 25, and 28 above, and further in view of the Prior Art disclosed by Applicant on page 18, lines 24-27 of the specification [hereinafter Prior Art].

Turner and Quinn disclose an electronic thermometer having all of the limitations of claim 8, as stated above in paragraph 2, except for the EEPROM being a 256 bit, 1-wire, parasite-power EEPROM.

The Prior Art discloses that a 256 bit, 1-wire, parasite-power EEPROM is a known EEPROM that is commercially available from Dallas Semiconductor under the model number DS2430A.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the removable module of the thermometer disclosed by Turner

Art Unit: 2859

and Quinn by replacing the EEPROM with the EEPROM from Dallas Semiconductor, since the Prior Art discloses that the EEPROM from Dallas Semiconductor is known to be commercially available to one having ordinary skill in the art, and since these EEPROMs are alternative and equivalent means for providing memory in the electronic thermometer.

4. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turner and Quinn, as applied to claims 1-7, 9, 11, 13, 18, 23, 25, and 28 above, and further in view of Kodai.

Turner and Quinn disclose an electronic thermometer having all of the limitations of claims 10 and 12, as stated above in paragraph 2, except for the memory being encapsulated and the connections to the memory chip being protected from fluid incursion.

Kodai discloses a circuit board having semiconductor elements thereon. The elements on the circuit board and its connections are encapsulated by an overcoat of a moisture-resistant material for protecting them from being damaged by a liquid.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the thermometer disclosed by Turner and Quinn by encapsulating the memory chip and its connections with a protective overcoat as disclosed by Kodai, since Kodai teaches that placing an overcoat on a semiconductor element is beneficial since it protects the element from being damaged by moisture.

Art Unit: 2859

5. Claims 14, 16, 17, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turner and Quinn, as applied to claims 1-7, 9, 11, 13, 18, 23, 25, and 28, above, and further in view of Denzene.

Turner and Quinn disclose an electronic thermometer having all of the limitations of claims 14, 16, 17, and 19-21, as stated above in paragraph 2, except for the terminals of the removable module and the temperature-calculating unit being fluid-resistant,

Denzene discloses an electrical device having a connector component that is fluid resistant. The area of the connector component that has connecting terminals is made resistant to fluid incursion in order to prevent the electrical components within the connector from being damaged by liquids (see figures 6 and 7).

Referring to claim 14, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the removable module and the temperature-calculating unit disclosed by Turner and Quinn by making the mating terminals fluid-resistant, as disclosed by Denzene, since Denzene teaches that making the mating terminals fluid-resistant is beneficial in order to prevent the electrical components within from being damaged by liquids.

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turner, Quinn, and Denzene, as applied to claims 14, 16, 17, and 19-21 above, and further in view of Kodai

Turner, Quinn, and Denzene disclose an electronic thermometer having all of the limitations of claim 15, as stated above in paragraph 5, except for the memory being overmolded within the connector component.

Kodai discloses a circuit board having semiconductor elements thereon. The elements on the circuit board and its connections are encapsulated by an overcoat of a moisture-resistant material for protecting them from being damaged by a liquid.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the thermometer disclosed by Turner, Quinn, and Denzene by overmolding the memory chip with a protective overcoat as disclosed by Kodai, since Kodai teaches that placing an overcoat on a semiconductor element is beneficial since it protects the element from being damaged by moisture.

7. Claims 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turner in view of Quinn and Denzene.

Turner discloses an electronic thermometer comprising:

a removable module (10) having mating terminals. The removable module has a probe storage chamber, a temperature-sensing assembly formed by a temperature sensor (thermistor), and a cable assembly having a connecting portion with mating terminals for electrically connecting to a temperature calculating unit; and

a temperature calculating unit (18) having a header assembly with terminals in electrical connection with a microprocessor system, and a probe cover storage chamber;

wherein the header assembly removably mates with the terminals of the removable module; and the chamber for storing the probe being able to prevent storage of the probe while a cover is installed on the probe.

Turner does not disclose the removable module having a memory for storing calibration information or probe identifying information, wherein the memory is capable of electrical communication with the temperature calculating unit when the removable module is installed to the temperature calculating unit, and includes calibration point parameters at different temperatures for calibrating the probe, and is incorporated in a connection portion in the probe assembly of the removable module, the memory storing a unique ID number associated with the probe; the removable unit having the cover storage chamber; and the calibration parameters being resistance values.

Quinn discloses an electronic thermometer comprising a removable unit that includes a temperature sensor and a memory (EEPROM) for storing calibration information, probe-specific algorithm parameters, or probe identifying information, wherein the memory is capable of electrical communication with a temperature-calculating unit when the removable unit installed to the temperature-calculating unit, and includes calibration point parameters at different temperatures for calibrating the probe and is incorporated in the probe assembly of the removable unit, and is incorporated in the probe assembly of the removable unit, and the memory storing a unique ID number associated with the probe that is a pre-programmed and validated EEPROM registration number; the sensor being a thermistor and the calibration parameters being resistance values. Quinn teaches that it is useful to provide the memory in the removable unit in order to store patient information and calibration information for ease of use (see abstract).

Denzene discloses an electrical device having a connector component that is fluid resistant. The area of the connector component that has connecting terminals is made resistant to

Art Unit: 2859

fluid incursion in order to prevent the electrical components within the connector from being damaged by liquids (see figures 6 and 7).

Referring to claim 22, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the thermometer disclosed by Turner by providing a memory in the removable unit, as taught by Quinn, in order to store patient information and calibration information for ease of use.

Furthermore, Turner teaches that the removable unit is removable in order to prevent the rest of the thermometer housing from being contaminated by a contaminated probe. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the thermometer disclosed by Turner by integrating the cover chamber with the removable unit instead of the temperature calculating unit in order to ensure that contaminated probe covers are not used by a clean removable unit when a contaminated probe is replaced.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the removable module and the temperature-calculating unit disclosed by Turner by making the mating terminals fluid-resistant, as disclosed by Denzene, since Denzene teaches that making the mating terminals fluid-resistant is beneficial in order to prevent the electrical components within from being damaged by liquids.

8. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turner and Quinn, as applied to claims 1-7, 9, 11, 13, 18, 23, 25, and 28 above, and further in view of U.S. Patent 4,790,324 to O'Hara et al [hereinafter O'Hara].

Turner and Quinn disclose an electronic thermometer having all of the limitations of claim 24, as stated above in paragraph 2, except for the removable module having a partially transparent housing for viewing the probe covers.

O'Hara discloses a thermometer having a housing with a chamber for storing clean probe covers. O'Hara teaches providing a partially transparent housing in the vicinity of the probe cover chamber in order to quickly see how many covers remain in the chamber and determine if the chamber needs to be refilled with covers.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the removable module disclosed by Turner and Quinn, by making providing a partially transparent housing, as taught by O'Hara, in order to see the covers and quickly determine if the chamber is empty and must be refilled.

9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turner, Quinn, and Denzene, as applied to claims 22 and 26 above, and further in view of O'Hara.

Turner, Quinn, and Denzene disclose an electronic thermometer having all of the limitations of claim 27, as stated above in paragraph 7, except for the removable module having a partially transparent housing for viewing the probe covers.

O'Hara discloses a thermometer having a housing with a chamber for storing clean probe covers. O'Hara teaches providing a partially transparent housing in the vicinity of the probe cover chamber in order to quickly see how many covers remain in the chamber and determine if the chamber needs to be refilled with covers.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the removable module disclosed by Turner, Quinn, and Denzene

Art Unit: 2859

by making providing a partially transparent housing, as taught by O'Hara, in order to see the covers and quickly determine if the chamber is empty and must be refilled.

Response to Arguments.

10. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mirellys Jagan whose telephone number is 571-272-2247. The examiner can normally be reached on Monday-Thursday from 8AM to 4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

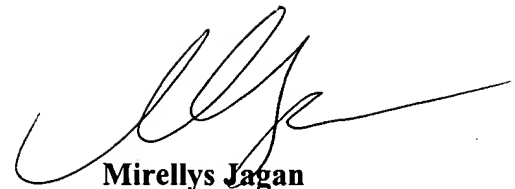
Application/Control Number: 09/942,334

Page 12

Art Unit: 2859

MJ

September 19, 2005

A handwritten signature in black ink, appearing to read 'Mirellys Jagan', with a long horizontal flourish extending to the right.

Mirellys Jagan
Patent Examiner
Technology Center 2800